

**Original/Duplicate/Triplicate
CONTRACT CERTIFICATE**

(For Other Works)

Date.....2020

Third & Part Bill

Division: **BBMP, Byatarayanapura**

Sub-Division: **BBMP, Vidyarnyapura**

Indent No. 28874

Bill Received No.

Dated

Divisional

Cash Book Voucher No..... Dated.....

Sub Divisional

Work Code: **008-18-000012**

008-18-000049

Schedule Docket No.

Head of Account: **P-3158**

Est. Cost: **Rs. 1090.00 Lakhs**

D.R.No. :

Name of Work (as per sanctioned estimate):

Package No. 03 (Package Consists of 21 Works).

Name of Contractor and Full Address:

Sri. C.G Chandrappa, #1C-301, 3rd Main Block, HRBR Layout, Kalyan nagar, Bangalore - 560 043.

Reference to Agreement No. **BBMP/EE/BTP/WO/148/2018-19**

Date: **22-10-2018**

Certified that the measurements were taken by me on **12/11/20** and recorded of Pages **357583** to **357590** of measurement Book No. **3576/17-18** and that the work is satisfactorily executed.

For CGC INFRA PROJECTS PVT LTD

Officer-in-charge of work

Certified that the measurement were taken by me on **12/11/20** and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

II Memorandum of Payment

Sub-Division Officer

- 1) Total value of work done or supplies made as per account within
- 2) Deduct amount to be held in reserve being percent Rs.....
- 3) " Balance
- 4) Deduct Payment:

- a. Amount of previous payment as in the Office Cash Book Voucher

No.....Dated.....S.D. No.....

adjusted towards cash advance recovery of

- b. Payments } cost store or other material supplied.
- Now made } recovery of amount creditable to this/other work
- Amount paid on this bill Cheque / Cash.

- 5) Balance being unpaid value of work done held in reserve.
- 6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.
- 7) Net amount due to or from Contractor unadjustments items.
- 8) Advance to Contractor for materials brought to site (as detailed) within.
- 9) Value of Government materials supplied.

Total amount adjusted -

For CGC INFRA PROJECTS PVT LTD

Contractor's Signature

Received Rs..... (in words).....

by cash and by adjustment of Payment as per memorandum (in final settlement of all demands)

Witness

- 1.
- 2.

For CGC INFRA PROJECTS PVT LTD

Dated Signature of Contractor

Paid by me by Cheque No.....Dated.....

Cash Rs.....

Dated.....

Initials of Officer making payment

Stamp

ಲೆಕ್ಕಾಚಾರ P 3158 SIP

DIRECTOR

ಇವು ಮೊಲಾರು ರೂ. **15088670/-** (For use in the Office)

ಇದರಲ್ಲಿ ರೂ. **737192/-** ಗಳನ್ನು ಹೊಂದಾಣಿ

ಇದರಿಂದ ರೂ. **14351478/-** ಗಳನ್ನು

T/N EPT/RTOS ಮುಖಾಂತರ ನಿವರಿಸಿದೆ

Executive Engineer

23/11

Sl. No.	Items grouped under sub-Heads and Sub-Works of the Estimate Description	Qty
1	Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, Roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum 00.2
3	Removing B.S.slab of Drain and stacking and as per the directions of the Engineer-in-charge of the work .	Sqm 51.
4	Removing and refixing stone slabs of drains and pointing in CM (1:3) and as per the directions of the Engineer-in-charge of the work .	Sqm 55.
5	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., 7.5cms thick and as per the directions of the Engineer-in-charge of the work .Upto 125%	Sqm 3.
6	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., 10cms thick and as per the directions of the Engineer-in-charge of the work .	Sqm 1.
7	Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. and as per the directions of the Engineer-in-charge of the work .Upto 125%	Cum
8	Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. and as per the directions of the Engineer-in-charge of the work .Upto 125%	Cum
	Above 125%	Cum
9	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.and as per the directions of the Engineer-in-charge of the work .Upto 125%	Cum
10	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305 (P.No.147, I.No.19.60 of PW,P&I WTD S.R 2016-17) Upto 125%	Cum
	Above 125%	Cum
11	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications.and as per the directions of the Engineer-in-charge of the work .Upto 125%	Cum
	Above 125%	Cum
12	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications. MORTH / Chapter 3(P.No.147, I.No.19.56 of PW,P&I WTD S.R 2016-17) Upto 125%	Cum
	Above 125%	Sqm
13	Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.and as per the directions of the Engineer-in-charge of the work.Upto 125% .	Sqm
	Above 125%	Sqm
14	Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kgl/sqm using mechanical means complete as per specifications. and as per the directions of the Engineer-in-charge of the work .Upto 125%	Sqm
	Above 125%	Sqm
		Sqm

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Amount	Qty	Rate Rs. P.	Amount	Qty	Cost	
5200.25	~~926008.51~~ <u>926009.00</u>	1293.33	178.07	~~230303.00~~ ^{.29}	6493.58	1156311 ^{.78} <u>79</u>	
1551.98	~~109135.00~~ ^{.23}	177.35	70.32	~~12471.00~~ ^{.25}	1729.33	121606 ^{.48} <u>49</u>	
5955.03	~~513324.00~~ ^{.59}	378.35	86.20	~~32614.00~~ ^{.77}	6333.38	545937.36	
976.60	~~695613.00~~ ^{.65}	75.60	712.28	~~53848.00~~ ^{.39}	1052.20	749461.02	
1630.33	~~1440462.00~~ ^{.77}	144.00	883.54	~~127229.76~~ ^{.76} <u>127230.00</u>	1774.33	1567691 ^{.13} <u>53</u>	
6427.36	~~597744.00~~ ^{.48}	1309.38	93.00	~~121772.00~~ ^{.34}	7736.74	719516.82	
820.89	~~42825.00~~ ^{.83}	0.00	52.17	0.00	820.89	42825.83	
0.00	0.00	0.00	52.17	0.00	0.00	0.00	
12705.92	~~1577058.00~~ ^{.89} <u>1577058.79</u>	2225.81	124.12	~~276268.00~~ <u>276267.53</u>	14931.73	1853326 ^{.32} <u>33</u>	
321.30	~~110054.00~~ ^{.89}	0.00	342.53	0.00	321.30	110054.89	
0.00	0.00	0.00	342.53	0.00	0.00	0.00	
1802.35	3409776.00	340.78	1891.85	~~644705.00~~ ^{.64}	2143.13	4054480 ^{.64} <u>49</u>	
0.00	0.00	2160.92	1891.85	~~4088136.50~~ <u>4088137.00</u>	2160.92	4088136.50	
3010.77	~~99024.00~~ ^{.23}	3467.09	32.89	~~114032.59~~ <u>114033.00</u>	6477.86	213056.82	
0.00	0.00	0.00	32.89	0.00	0.00	0.00	
5212.24	76828.00	1575.97	14.74	~~23229.79~~ <u>23230.00</u>	6788.21	~~100059.79~~ <u>100058.22</u>	
0.00	0.00	9395.29	14.74	~~138487.00~~ ^{.57}	9395.29	138486.57	
9260.34	~~273087.00~~ ^{.43} <u>273087.43</u>	~~9395.29~~ ^{.34} <u>9395.29</u>	29.49	~~137109.03~~ <u>277067.00</u>	~~13909.68~~ <u>18655.63</u>	~~410196.46~~ <u>550154.53</u>	
0.00	0.00	<u>0.00</u>	29.49	<u>0.00</u>	<u>0.00</u>	0.00	
		4745.95		139958.06	4745.95	139958.06	

Sl. No.	Items grouped under sub-Heads and Sub-Works of the Estimate Description	
15	Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per specifications. and as per the directions of the Engineer-in-charge of the work . Upto 125% Above 125%	Cum
16	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6 in PW,P&I WTD S.R 2016-17) Upto 125% Above 125%	Cum
17	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Sqm
18	Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Sqm
19	Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum
20	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Sqm
21	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials separately complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum
22	Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum
23	Cement concrete pavement. Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregates , with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rakers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete and as per the directions of the Engineer-in-charge of the work .	Cum

Unit	Previous Measurement		Present Measurement			Total Upto Date		Remarks
	Qty	Amount	Qty	Rate Rs. P.	Amount	Qty	Cost	
✓	273.64	1677821.00	<u>65.77</u> 68.41	6131.49	<u>403268.00</u> 419455.23	<u>339.41</u> 342.05	<u>2081089.02</u> 2097276.23	
✓	0.00	0.00	<u>482.51</u> 479.87	6131.49	<u>2958505.00</u> 2942318.10	<u>482.51</u> 479.87	<u>2958505.24</u> 2942318.10	
✓	59.99	457029.00 ⁰²	0.00	7618.42	0.00	59.99	457029.02	
✓	0.00	0.00	0.00	7618.42	0.00	0.00	0.00	
✓	71749.49	243948.00 ²⁹	9415.45	3.40	<u>32012.53</u> <u>32013.00</u>	81164.94	275960.80	
✓	74222.62	<u>1010169.86</u> <u>1010170.00</u>	9415.45	13.61	<u>12</u> 128144.00 ²⁷	83638.07	1138314.13	
✓	3167.80	2751817.00 ⁷⁵	376.62	8686.84	3271638.00 ⁶⁸	3544.42	30789809.43	
✓	2750.26	1597103.00 ⁴⁸	389.80	580.71	226360.00 ⁷⁶	3140.06	1823464.24	
✓	257.42	228025.00 ²¹	0.00	885.81	0.00	257.42	228025.21	
✓	257.42	1098084.00 ²²	0.00	4265.73	0.00	257.42	1098084.22	
✓	669.33	<u>4453199.74</u> <u>4453200.00</u>	0.00	6653.22	0.00	669.33	4453199.74	

Sl. No.	Items grouped under sub-Heads and Sub-Works of the Estimate Description	Un	Qty
25	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor > 0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency > 130lm/w at 1W & Fixture Efficiency > 80lm/w with nominal CRI > 75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable. 26/4.35 for B1/B2 Roads as per IS 1944 Part I & Part II. LED Streetlight 65watts (Pg No. 26, Item No. 4.35.3)	No	
26	Supplying and Fixing of..... mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I. pipe (Pg No. 108, Item No. 17.12)	No	
27	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded Aluminium unsheathed wire single core/multi core cable in open or consealed system of wiring. a) 4 sqmm. (Pg No. 12, Item No. 2.12.1)	No	
28	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) conforming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & conforming to GTP of ROUP-A.3.5 core 25sqmm (Pg No. 5, Item No. 7.4.5)	Rmt	
29	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. 25 sqmm to 75 sqmm (Pg No. 61, Item No. 7.8.7)	Rmt	
30	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes 25 sqmm Long Barrel (Pg No. 64, Item No. 7.21.7)	No	
31	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. and as per the directions of the Engineer-in-charge of the work.	Cum	
32	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work.	Cum	
33	Providing laying plain/ reinforced cement concrete M20 Grade for Box Drain walls of thickness 10cm to 20cm including centering shuttering for work etc. complete as per approved drawing and design and as per the directions of the Engineer-in-charge of the work.	Cum	
34	Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. and as per the directions of the Engineer-in-charge of the work.	Tonne	
35	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc. and as per the directions of the Engineer-in-charge of the work.	Sqm	
36	Providing and constructing granite size stone masonry in foundation cement mortar 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work.	Cum	

Unit	Previous Measurement		Present Measurement			Total Upto Date		Remarks
	Qty	Amount	Qty	Rate Rs. P.	Amount	Qty	Cost	
	0.00	0.00	88.00	20030.40	1762675.00 ^{.20}	88.00	1762675.20	
	0.00	0.00	135.00	955.51	128993.00 ⁸⁵	135.00	128993.85	
	0.00	0.00	440.00	8.03	3533.00 ^{.20}	440.00	3533.20	
	0.00	0.00	150.00	177.19	26578.50 ^{.50}	150.00	26578.50	
	0.00	0.00	150.00	37.24	5586.00	150.00	5586.00	
	0.00	0.00	55.00	22.03	1211.65 ^{.65}	55.00	1211.65	
	266.59 ^{.58}	146381.74 <u>146387.00</u>	0.00	549.11	0.00	266.58 <u>266.59</u>	146381.74 <u>146387.23</u>	
	777.04	4447075.00 <u>4447132.00</u>	0.00	5723.17	0.00	777.04	4447075.00 <u>4447132.02</u>	
	752.71	8885553.00 ^{.37}	0.00	11804.75	0.00	752.71	8885553.37	
	41.83	2875413.00 ^{.44}	0.00	68740.46	0.00	41.83	2875413.44	
	3538.15	361174.00	0.00	102.08	0.00	3538.15	361174.35	
	223.64	1062044.00	0.00	4748.90	0.00	223.64	1062044.00	

Sl. No.	Items grouped under sub-Heads and Sub-Works of the Estimate Description	
37	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6 edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Sqm
38	Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum
39	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.530 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum
41	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc. and as per the directions of the Engineer-in-charge of the work	No
42	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No.182, I.No. 24.1 of PW,P&I WTD SR 2016-17)	Sqm
43	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineerin - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete)	Rmt
44	Providing chain link fencing 50mm size of 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint	Sqm
45	Providing and fixing M.S. Block pipe of 38mm dia, of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint.	Rmt
47	Removing and resetting of footpath slab and as per the directions of the Engineer-in-charge of the work .	Sqm
48	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum
49	Providing and constructing granite size stone masonry in foundation cement mortar 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum
52	KSRRB M400-6.1. Construction of granular sub-base by providing close graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. - For Grading II Material(P.No.155, I.No.20.4.2 of PW,P&I WTD S.R 2016-17) Upto 125%	Cum
	Above 125%	Cum
E1	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Amount	Qty	Rate Rs. P.	Amount	Qty	Cost	
67.14	381132.62	0.00	5676.67	0.00	67.14	381131.62	
627.57	69045.25	0.00	110.02	0.00	627.57	69045.25	
51.00	314730.18	0.00	6171.18	0.00	51.00	314730.18	
1235.00	438425.00	0.00	355.00	0.00	1235.00	438425.00	
0.00	0.00	0.00	68.05	0.00	0.00	0.00	
0.00	0.00	0.00	928.91	0.00	0.00	0.00	
0.00	0.00	0.00	747.44	0.00	0.00	0.00	
0.00	0.00	0.00	367.48	0.00	0.00	0.00	
623.25	88364.39	0.00	141.78	0.00	623.25	88364.39	
26.14	10500.00 10499.65	0.00	401.67	0.00	26.14	10499.65	
40.97	122071.75	0.00	2979.54	0.00	40.97	122071.75	
0.00	0.00	0.00	1781.83	0.00	0.00	0.00	
0.00	0.00	0.00	1781.83	0.00	0.00	0.00	
0.00	0.00	0.00	5418.00	0.00	0.00	0.00	

Sl. No.	Items grouped under sub-Heads and Sub-Works of the Estimate Description	Unit
E2	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm
E3	Providing and fixing M.S. Gate as per Chief Architect Drawing, using 50mm x 50mm 14 guage M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members as shown in the drawing etc., complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specification. (P. No. 45 / I. No. 7.37 of CSR 2018-19)	Sqm
E4	KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. (Page No. 123 Item No. 15.74 of SR 2018-19).	Sqm
E5	KSRRB M800 Road markers/ Road stud , KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS (Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97-DO III Dt 11.06.1997.The height, width and length shall not exceed 50mm, 100mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree.The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19mm and height not less than 30mm)from the body is to be a minimum value of 500kg. Fixing will be by drilling holes on the road for the shanks to go inside, without ails and using epoxy resin based adhesive as per manufacture's recommendation and complete as directed by the engineer.(P.No-187,I No-24.41)	Nos
Total		

CERTIFICATE

1. Certified that the above work done satisfactory and no materials issued from departmentally.

Original/Duplicate Bill
 CO-11

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Amount	Qty	Rate Rs. P.	Amount	Qty	Cost	
0.00	0.00	0.00	2337.00	0.00	0.00	0.00	
0.00	0.00	0.00	3416.21	0.00	0.00	0.00	
0.00	0.00	0.00	107.75	0.00	0.00	0.00	
0.00	0.00	0.00	382.23	0.00	0.00	0.00	
67356465.00		15088673.00			82445138.00		
6,73,56,367		1,50,88,670.47			8,24,45,037		


 Assistant Executive Engineer
 Vidyaranyapura Sub Division
 BBMP, Bangalore - 97